

ABSTRACT

In an optical recording medium comprising a grooved
5 light-transparent substrate, a phase change recording
layer, a dielectric layer and a reflective layer, recording
is carried out by irradiating a laser beam to the recording
layer through an objective lens in an optical system. The
recording is carried out in the grooves under the
10 conditions: $0.48 \leq P_T/(\lambda/NA) \leq 0.74$, and $P_T \leq 0.50 \mu\text{m}$
wherein λ is a laser beam wavelength, NA is an objective
lens numerical aperture, and P_T is a track pitch, thereby
forming a recorded mark having opposite ends extending out
of the groove. This enables high density recording and
15 increases the data transfer rate of a phase change optical
recording medium.